REMARKS

In the Office Action mailed on February 24, 2004, the Examiner has required, pursuant to section 1.105, that Applicants submit the following information: (a) a list of authors for Exhibit A attached to the December 8, 2003 declaration of Dr. Shepard ("Exhibit A"); (b) a publication date for Exhibit A; (c) evidence of the "priority date" of Exhibit A; (d) information on the relationship between Exhibit A and the ICCAD 99 publication; (e) a clarification regarding inventorship of the present application in view of Exhibits A and B and the ICCAD 99 paper; (f) documentation pertaining to the IBM grant cited in the "Static Noise Analysis . . ." article, including documents submitted for the proposal and detailing the purposes of the grant; and (g) a statement as to whether IBM has rights to the inventions of the present application.

Applicants respectfully submit the following responses.

(a) Authorship of Exhibit A

It is noted that Mr. Kim was a student of Dr. Shepard's and that it is believed that Mr. Kim contributed to the drafting and editing of the paper submitted as Exhibit A. Thus, it is believed that this paper is properly referenced as being co-authored by Mr. Kim and Dr. Shepard. As noted by the Examiner, and explained below in (d), Exhibit A is substantially identical to the paper published in the proceedings of ICCAD 99, co-authored by Mr. Kim and Dr. Shepard, and attached as present Exhibit 1.

(b) Publication Date of Exhibit A

As discussed below, Exhibit A was submitted to the ICCAD 99 publication department located in Boulder, Colorado, by Dr. Shepard on April 9, 1999. This implies

a publication date for Exhibit A on or after April 9, 1999. Applicants have so far been unable to ascertain the exact publication date of Exhibit A. Applicant notes that the ICCAD 99 meeting was held in San Jose, CA, from November 7 through 11, 1999, however these dates do not necessarily reflect the date on which Exhibit A, an electronic format document, became "accessible to the public" *See* MPEP § 2128. Applicants note that the copyright notice for Exhibit 1 (the paginated version of Exhibit A that appears in the bound ICCAD 1999 volume and on the IEEE and other web sites) merely lists "IEEE 1999."

(c) Priority Date of Exhibit A

Applicants are unclear what is meant by "priority date" as used in the context of this paragraph of the Office Action. However, Applicants attach Exhibit 2, an announcement for the ICCAD 99 meeting providing for electronic submission of complete papers to the ICCAD 99 Boulder, Colorado, publication department with a "[d]eadline for submissions: April 9, 1999." The ICCAD 99 announcement further provides: "Papers will not be accepted for submission after April 9, [1999]. This deadline is *firm* and *inflexible*" (emphasis added). Accordingly, Exhibit 2 confirms and supports Dr. Shepard's declaration that Exhibit A, the paper he submitted to ICCAD 99, bears the UNIX time-date stamp of April 9, 1999 and was submitted on this date. [Declaration at page 2]. This evidences the existence of Exhibit A on or before April 9, 1999.

(d) Relationship between Exhibit A and the ICCAD 99 Publications

Exhibit A, the paper submitted to ICCAD 99 on April 9, 1999, by Dr. Shepard, and included with his declaration filed on December 8, 2003, is substantially identical to

Exhibit 1, the paper published in the ICCAD 99 proceedings. The only apparent differences being that Exhibit 1 includes an identification of the authors as Mr. Kim and Dr. Shepard, notes the authors' affiliation with Columbia University, includes page numbers and has a copyright notice, "IEEE 1999."

(e) Inventorship of the Present Application

As noted above, Exhibit A, Exhibit 1 (the paper published in the proceedings volume of ICCAD 99) and Exhibit B (a publication of the proceedings of the 37th Conference on Design Automation) are believed to have been properly designated as being co-authored by Mr. Kim and Dr. Shepard, reflecting the fact that the contributions of Mr. Kim were sufficient to merit his inclusion as a co-author in an academic papers. Notwithstanding Mr. Kim's inclusion as a co-author on these papers, his contribution to the present application is believed to be limited to implementing in computer code an algorithm devised by Dr. Shepard. It is believed that Mr. Kim's work in this regard does not meet the meet the stricter requirements for joint inventorship.

In *Ethicon Inc. v. United States Surgical Corp.*, the Federal Circuit explained that the determination of whether an individual's contribution necessitates joint inventorship turns on conception:

Because "[c]onception is the touchstone of inventorship," each joint inventor must generally contribute to the conception of the invention. Burroughs Wellcome Co. v. Barr Lab., Inc., 40 F.3d 1223, 1227-28 . . . (Fed. Cir. 1994). "Conception is the 'formation in the mind of the inventor, of a definite and permanent idea of the complete and operative invention, as it is hereafter to be applied in practice." Hybritech, Inc. v. Monoclonal Antibodies, Inc., 802 F.2d 1367, 1376 . . . (Fed. Cir. 1986) (quoting 1 Robinson on Patents 532 (1890)). An idea is sufficiently "definite and permanent" when "only ordinary skill would be necessary to reduce the invention to practice, without

extensive research or experimentation." Burroughs Wellcome, 40 F.3d at 1228.

135 F.3d 1456, 1460 (Fed. Cir. 1998).

The inventions of the present application were conceived by Dr. Shepard when he devised the algorithm that was later implemented by Mr. Kim at Dr. Shepard's direction. In other words, conception by Dr. Shepard had already occurred before Mr. Kim implemented the algorithm. Furthermore, since it is believed Mr. Kim exercised "ordinary skill" to put into computer code the algorithm devised by Dr. Shepard, it is submitted that Mr. Kim did not "contribute to the conception of the invention" defined by the current claims. It is respectfully submitted that, according the standard adopted by the Federal Circuit in *Ethicon*, Dr. Shepard is properly listed as the sole inventor of the present application, as indicated in the Declaration signed by Dr. Shepard on June 9, 2000.

(f) Documentation for the IBM "Grant"

Notwithstanding the reference to "a grant form the IBM corporation" in the "Static Noise . . . " paper cited by the Examiner, the acknowledgment in that paper should have been to a *gift* from IBM. Applicants note that the final page of Exhibit A acknowledges "a gift from the IBM Corporation under the University Partnership Program." Applicants understand that the IBM University Partnership Program (the "UPP") is considered to be an unrestricted gift for tax purposes and that IBM is explicitly disallowed from receiving any payment in exchange for such gifts, including ownership of patents obtained from research conducted using the donated IBM equipment.

Applicant respectfully submits that they are unaware of any documentation supporting the gift from IBM under UPP. Applicant is also not aware of any other "grant" from IBM related to the current invention and has been unable to locate any additional documentation in this regard.

(g) IBM's Rights to the Inventions of the Present Application

The acknowledgment in the ICCAD 99 paper is for "a gift from the IBM Corporation." As explained above, as a consequence of the unrestricted nature of the UPP gift, it is believed that IBM cannot properly claim any rights to the inventions of the present application by because of this gift. Applicant is currently unaware of any other basis on which IBM can claim rights to the present invention.

CONCLUSION

Applicant respectfully submits that the above constitutes a candid and good faith response to the Examiner's requirement for information mailed on February 24, 2004. In the event that any additional information is deemed necessary, Applicant's attorneys are available to participate in a telephone conference with the Examiner on the number given below.

Respectfully submitted,

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